

## ABSTRACT

### METHOD AND APPARATUS FOR PREDISTORTION OF AN X-DSL LINE DRIVER

5 An apparatus and method is provided for minimizing in channel distortion in an X-DSL line driver is disclosed. The apparatus may be incorporated in an existing X-DSL architecture without additional circuitry. Out of band monitoring of a channel is implemented to adaptively minimize out of band interference and in band distortion. A  
10 unique training sequence, suitable for DMT line codes is set forth. The training sequence allows a full spectral characterization of the downstream signal space with a single upstream monitoring tone. The invention may be used with multi-channel X-DSL line drivers interfacing with any of a number of multi-channel supply architectures. The apparatus may be applied with equal advantage to communication  
15 protocols other than X-DSL. The apparatus may be applied with equal advantage in wired and wireless media.

# Application for U.S. Patent

## METHOD AND APPARATUS FOR PREDISTORTION OF AN X-DSL LINE DRIVER

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